REMARKS

The drawing objection is deemed to be moot in view of the above amendments to Claim 7. Likewise, the rejections of Claims 7 and 8 under 35 USC §112, paragraphs 1 and 2, are deemed overcome by said amendments.

Applicants do, however, take issue with the comments found on page 4 of the Office Action, to wit that the metes and bounds of the subject matter of Claim 7 would not be reasonably discerned by one of ordinary skill in the art. In any event, the rejection is deemed moot in light of the rewording of Claim 7.

The rejection of Claims 7 and 8 as being anticipated by Shibata et al. under 35 USC §102(b) is traversed, and reconsideration thereof is respectfully requested.

The Office Action does not speak to how the limitations found on the last two clauses of Claim 7 are taught, suggested or even attainable with the Shibata et al. valve. Those claimed features are shown on Figs. 5A and 5B where the orifice is designated by numeral 11.

To further illustrate what occurs on the cylinder as a result of the sizing of the orifice length, applicants have prepared the attached sketches (a), (b) and (c) in which (a) and (b) show the fuel release occurring on the sharp angled side of the non-parallel orifice axis line. Sketch (c) illustrates the differences in geometry between the Shibata et al. valve and that of the present invention.

When the released fuel moves to the cylinder side of the injection hole while turning, the deflection of the fuel occurs in a circumferential direction of

the orifice, forming a rich fuel part and a lean fuel part. The inventors found that the position of the rich fuel part in a circumferential direction could be controlled by adjusting the length of the orifice. According to the present invention, $\theta g > \theta f$, with the result that adhesion of fuel to a cylinder head can be decreased. There is no such teaching or even suggestion of this arrangement in the prior art.

Accordingly, early and favorable action is earnestly solicited.

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 056207.52747US).

Respectfully submitted,

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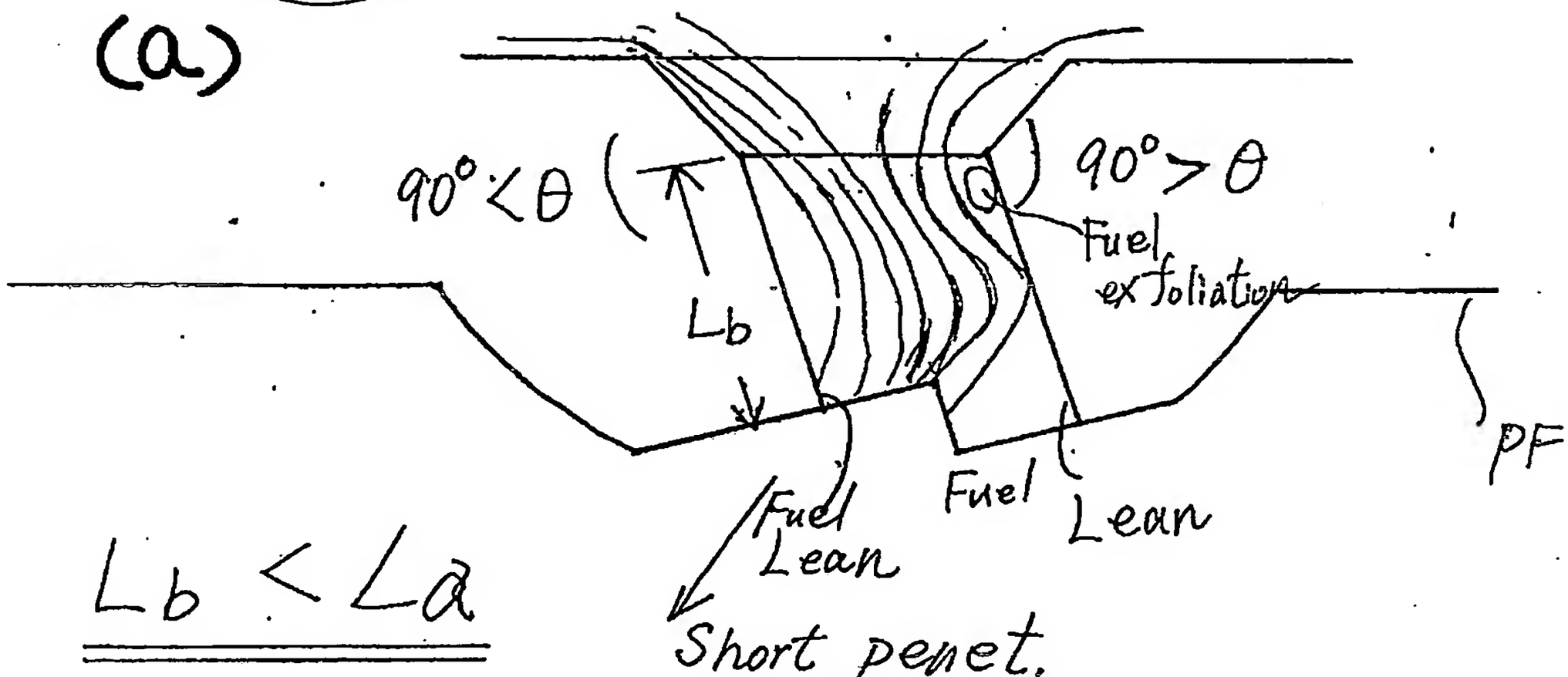
Sketch

(a)

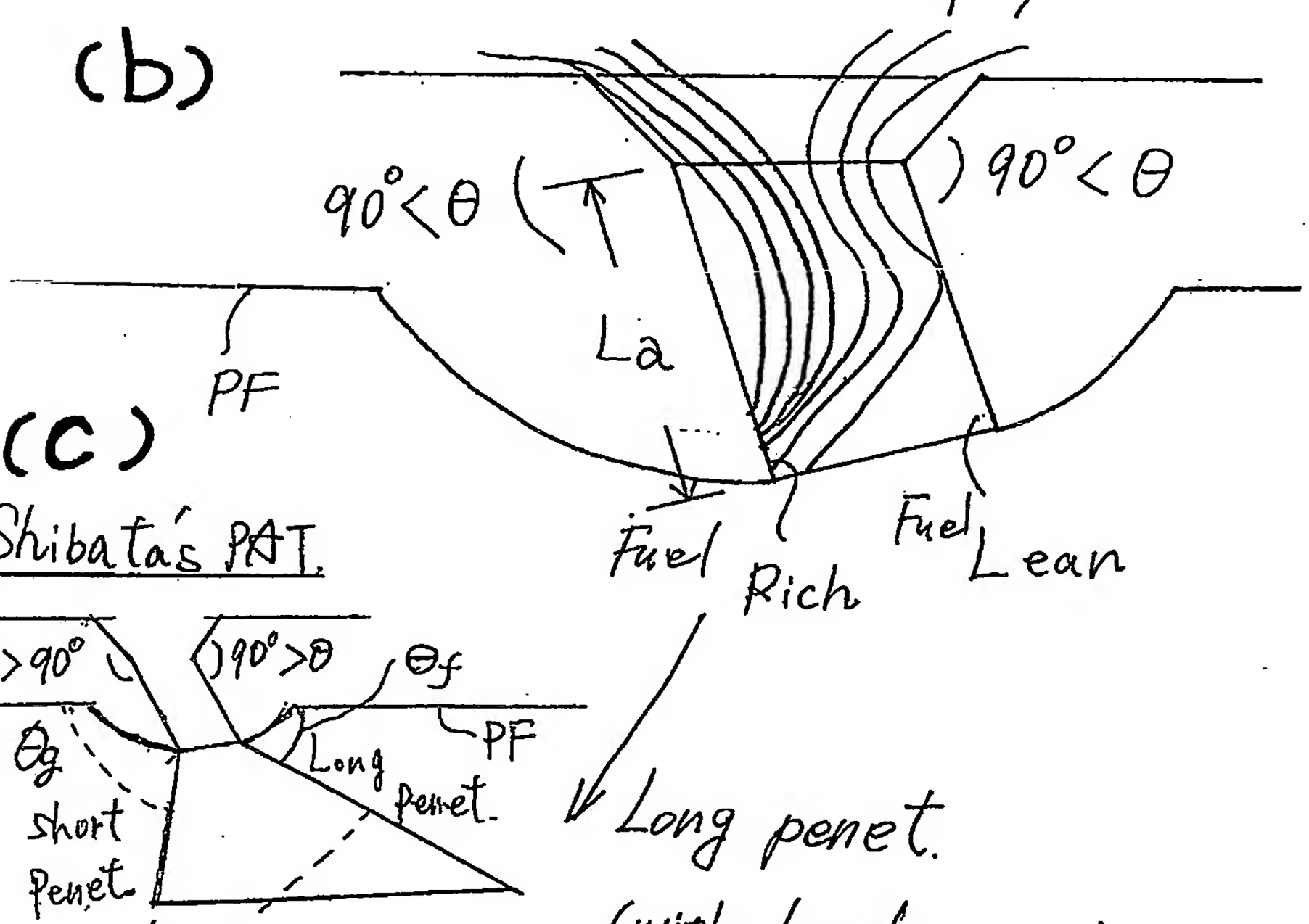


Lb < La

Short penet.

(no Lead spray)

(b)



(c)

Shibata's PAT.

Long penet.

(with Lead spray)

present invention

$\theta_g > \theta_f$ (present invention), but $\theta_g \leqq \theta_f$ (Shibata)